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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,807	10/15/2003	Achim Kaemmler	1509-382	1698

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EXAMINER	
WU, XIAO MIN	
ART UNIT	**PAPER NUMBER**
2629	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/684,807	**Applicant(s)** KAEMMLER, ACHIM
	Examiner XIAO M. WU	**Art Unit** 2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 30 March 2005.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 15 October 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/15/2003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-4, 6-11 and 14-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Jou (US 2003/0095101).

As to claims 1, 15, 18, 26, Jou discloses an interface device for interfacing a user's input with a computer, the interface device comprising: a mechanical input device (20, Fig. 2) adapted to transform a mechanical input operation of the user into an input signal for input into the computer, said mechanical input device (20) having at least one movable element (e.g. ball 21, roller 22, and wheel 23) adapted to be moved by the user to perform the input operation; an electrical generator (24) mechanically coupled to said at least one moveable element (e.g. roller 22, wheel 23) to generate electrical energy in response to the input operation being performed (see page 2, [0021]); and an electrical coupler (25) adapted to electrically couple said electrical generator (24) to a rechargeable battery (26) for recharging said battery with said electrical energy.

As to claims 3, 16, 22, 24, Jou discloses the at least one movable element comprises a ball (21) disposed in a housing and adapted to be rolled on a planar workspace.

As to claim 4, Jou discloses the at least one movable element is a trackball (see [0009]) which comprises a ball disposed in a housing of the computer and adapted to be rolled by a digit of the user.

As to claim 7, Jou discloses that the electrical generator is an AC generator. It is well known in the art the AC electrical generator a step motor winding configuration.

As to claim 8. Jou discloses the battery is adapted for pulse charging with pulses of electrical energy (e.g. Jou's generator is an AC generator, see [0024] at page 3).

As to claims 9, 21, Jou discloses a circuitry 52 can include overvoltage and/or overcurrent protection, a full wave rectifier for converting the energy into direct current and the D.C. energy can then be provided to a power storage means 53 (see 0024 at page 3). The circuitry 52 of Jou is equivalent to a filter adapted to smooth pulses of electrical energy before application to said battery.

As to claim 10, Jou discloses a user manipulandum (20) adapted to be moveable in two degrees of freedom in a planar workspace with respect to a ground surface (e.g. moving in x and y directions), the user manipulandum (20) carrying at least said mechanical input device (21, 20, 23) and the electrical energy generator (24) .

As to claims 11. 27, Jou discloses the wireless mouse including a wireless transmitter adapted to wirelessly transmit an input signal to the computer (see [0003, 0009]) at page 1).

As to claims 14, 17, Jou electrical circuitry located in the device for deriving the input signal, the electrical circuitry having a power supply terminal including a connection to a terminal adapted to be connected to an electrode of the battery (see Fig. 5).

As to claims 19, 25, Jou discloses the mechanical input operation comprises rotating a wheel (23, Fig. 2) about a wheel axle to which an electrical energy generator is coupled.

As to claims 6 and 20, Jou discloses the wheel comprises rotating in pre-defined step angles and generating a pulse of electrical energy for each step angle of rotation (see [0021] at page 2, also see [0024] at page 3).

As to claim 23, Jou discloses A cordless computer mouse comprising: a battery (26, Fig. 2); a manually operable actuator (21, 22, 23) arranged within the mouse; and a transducer (see [0003, 0009] at page 1) adapted to be electrically connected to said battery and mechanically connected to said manually operable actuator; wherein said transducer is adapted to transduce kinetic energy of said manually operable actuator into electrical energy for charging the battery (see Figs 2-6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jou (US 2003/0095101).

As to claim 12, Jou discloses that it is well known to use cable to transmit the signals between computer and mouse. It would have been obvious to place the rechargeable battery in the computer if cable is selected as a communication link such that the weight of the mouse The interface device of claim 10, wherein said user manipulandum further comprises a cable adapted to transmit said input signal and electrical energy to the computer.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jou (US 2003/0095101) in view of Siddiqui (US Patent No. 5,912,661).

As to claim 2, Jou does not specifically discloses the at least one movable element comprises a wheel (23), said wheel adapted to be rotatable about a wheel axle by a digit of the user, and wherein said generator is adapted to be mechanically coupled to said wheel axle. Siddiqui is cited to teach a scrolling wheel which is rotatable a wheel axle by a digit. It would have been obvious to one of ordinary skill in the art to have modified Jou with the features of the scrolling wheel a taught by Siddiqui so as to increase the mouse function.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jou (US 2003/0095101) in view of Mikulin et al. (US 2005/0012716).

As to claim 5, it is noted that Jou does not disclose the ball is magnetized. Mikulin is cited to teach a mouse device including a magnetized ball (see [0066] at page 3). It would have been obvious to one of ordinary skill in the art to have modified Jou with the features of the magnetized ball as taught by Mikulin such that the mechanical movement would induce the variation of the electrical magnetic field so as to generate electrical power.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jou (US 2003/0095101) in view of Lilenfeld (US Patent No. 6,744,421).

As to claim 13, it is noted that Jou does not discloses the mechanical input device is adapted to be integrated into a housing of the computer. Lilenfeld is cited to teach a wireless mouse similar to Jou. Lilenfeld further discloses that the mouse is adapted to be integrated into a housing of the computer housing. (see Figs. 6a, 6b). It would have been obvious to one of ordinary skill in the art to have modified Jou with the features of the mouse as taught by

Lilenfeld because Lilenfeld provides the mouse directly sends the signal to the computer when it is adapted into the computer (see col. 8, lines 11-15).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US 3,660,747, 4,754,268, 5,581,519, 5,831,553, 6,903,725, and 2004/0196262 are cited to teach an input device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.
April 2, 2006

XIAO M. WU
Primary Examiner
Art Unit 2629